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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,994	07/07/2003	Yen-Hsi Lin	87391.0200	9823

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WASHINGTON, DC 20036

EXAMINER

NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
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1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No. 10/612,994	Applicant(s) LIN, YEN-HSI	
	Examiner Patrick D. Niland	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/1/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-21 and 26-34 is/are pending in the application.
- 4a) Of the above claim(s) 11-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/23/06</u> | 6) <input type="checkbox"/> Other: _____ |

1. The amendment of 12/1/06 has been entered. Claims 11-21 and 26-34 are pending.

This application contains claims 11-21 drawn to an invention nonelected with traverse in the Paper of 11/4/05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

The German documents of the IDS of 10/23/06 have not been supplied with the IDS and are not readily available to the examiner. They have therefore not been considered in accordance with 37 CFR 1.97 and 1.98.

2. The amendment filed 12/1/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

A. The newly added material to page 5, line 23 to page 6, line 8 of the instant specification, particularly recitations denoted by "includes" or "including" which broaden the scope of the recited materials to include additional materials not described in the originally filed specification. No basis is seen for the originally presented percentages to the newly recited ratio ranges, particularly considering the change in decimal accuracy and the change in basis of the prior recited percentages to the newly recited basis for the newly recited ratios. No basis is seen for changing "sulfonate salt" to "sulfonate functional group". Regarding the amendment of page 6, line 21 to page 7, line 9 of the specification: No basis is seen for the changing of "lipophilic monomer solves in". The specification now includes all monomer whereas the originally filed specification only referenced the solved monomer. The new scope is new matter. Changing of

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the decimal accuracy of the prior recited percentages is new matter. Changing of the basis for the originally disclosed percentages originally present in the specification to the newly recited basis for the newly recited ratios added to the specification after filing have no basis in the originally filed specification and are therefore new matter. There is no basis in the originally filed specification for the amendment of page 14, line 23 to page 15, line 2, particularly "The waterborne polyurethane is polymerized by hydrophilic monomers" nor the recitation regarding using the polyurethane as a surfactant.

Applicant is required to cancel the new matter in the reply to this Office Action.

3. Claims 26-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

A. There is not basis in the originally filed specification for the entire scope of the newly claimed "phase-change material having a polar functional group and a lipophilic moiety".

B. There is not basis in the originally filed specification for "wherein the weight ratio of the waterborne polyurethane over the composition is 0.05-0.40" nor "wherein the weight ratio of the waterborne polyurethane over the composition is 0.10-0.30".

C. There is not basis in the originally filed specification for "wherein the weight ratio of the lipophilic monomer over the phase-change material and the waterborne polyurethane is 0.03-0.12 and 0.25-0.5, respectively, and the lipophilic monomer is isocyanurate of 1,6-

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hexamethylene diisocyanate, which can react with the waterborne polyurethane to form shells of the microcapsules”.

D. There is not basis in the originally filed specification for “wherein the weight ratio of the lipophilic monomer over the phase-change material is 0.05-0.10”. The prior claimed percentage related only to that lipophilic material solving in the phase change material.

E. There is not basis in the originally filed specification for “wherein the weight ratio of the lipophilic monomer over the waterborne polyurethane is 0.3-0.45” including regarding decimal accuracy of these numbers.

F. There is not basis in the originally filed specification for the instant claim 33, particularly regarding the newly established scope of the waterborne polyurethane created by “comprises”. Urethanes are thereby now encompassed which were not described in the originally filed specification.

G. There is not basis in the originally filed application for the new claim 34, particularly the newly included sulfonate functional groups not previously described in the originally filed specification.

4. Claims 26-34 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Xing is representative of the closest prior art considered by the examiner. While there are numerous references relating to microcapsule compositions containing wax and polyurethane or its intermediate reactants, the prior art does not disclose the instantly claimed combinations of ingredients and amounts thereof to the extent that these amounts can be determined. The examiner has considered the overlap between phase change materials and the other materials in

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the instant claims given that they can all change phases. But, even considering this reading of the claims, the examiner sees no prior art disclosure of the instantly claimed inventions nor teachings which render the instant claims 26-34 obvious.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

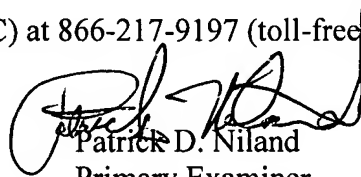
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick D. Niland
Primary Examiner
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